US PTO Cust. No. 25280

## **IN THE CLAIMS:**

Please delete Claims 1-10 and 15-24 in lieu of the following new claims:

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## NEW CLAIMS:

29.(New) A treated substrate comprising

a finish comprising a) compounds selected from the group consisting of metal particle-containing compounds, metal ion-containing compounds, metal-ion generating compounds, and any combinations thereof, and b) at least one binder material, wherein said binder material, after processing and application to said substrate, is not readily water soluble, is not susceptible to attack by a standard laundering additive selected from the group consisting of detergents, solvents, bleaches, or mixtures thereof, and is not susceptible to degradation due to exposure to high temperatures associated with standard laundry drying temperatures;

a substrate selected from the group consisting of a yarn, a fabric comprised of individual fibers, and a film;

wherein said finish is adhered to at least one portion of the surface of said substrate; wherein said at least one portion of said treated substrate retains at least about 50% of said adhered to finish after 10 washes as performed in accordance with the wash procedure of AATCC Test Method 130-1981;

wherein said treated substrate is electrically non-conductive;

wherein if said metal is zinc, then at least one hydrophilic binder compound at least one hydrophobic binder compound are present adhering said zinc compound to said substrate; and



wherein said finish exhibits antimicrobial properties.

- 30.(New) The treated substrate of Claim 29 wherein said substrate is an individual yarn.
- 31.(New) The treated substrate of Claim 29 wherein said substrate is a textile fabric.
- 32.(New) The treated substrate of Claim 29 wherein said substrate is a film.
- 33.(New) The treated substrate of Claim 29 wherein said finish comprises metal particles.
- 34.(New) The treated substrate of Claim 29 wherein said finish comprises metal-ion generating compounds.
- 35.(New) The treated substrate of Claim 33 wherein said finish comprises a metal selected from one of the transition metals.
- 36.(New) The treated substrate of Claim 35 wherein said transition metal is selected from the group consisting of silver and zinc.
- 37.(New) The treated substrate of Claim 34 wherein said finish comprises a metal selected from one of the transition metals.

38.(New) The treated substrate of Claim 37 wherein said transition metal is selected from the group consisting of silver and zinc.

## 39.(New) A treated substrate comprising

a non-electrically conductive treatment comprising a) metal-containing compounds selected from the group consisting of metal particle-containing compounds, metal ion-containing compounds, and any combinations thereof, and b) at least one binder material, wherein said binder material, after processing and application to said substrate, is not readily water soluble, is not susceptible to attack by a standard laundering additive selected from the group consisting of detergents, solvents, bleaches, or mixtures thereof, and is not susceptible to degradation due to exposure to high temperatures associated with standard laundry drying temperatures; and

a substrate selected from the group consisting of a yarn, a fabric comprised of individual yarns, and a film;

wherein said non-electrically conductive treatment is adhered to at least a portion of the surface of said substrate; and

wherein said at least a portion of the surface of said treated substrate exhibits a) a log kill rate for *Staphylococcus aureus* of at least 1.5 and b) a log kill rate for *Klebsiella pneumoniae* of at least 1.5, both as tested in accordance with AATCC Test Method 100-1993 for 24 hour exposure, and c) retention of at least about 50% of said adhered to finish, all after at least 10 washes, said washes performed in accordance with the wash procedure as part of AATCC Test

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## Method 130-1981; and

wherein if said metal is zinc, then at least one hydrophilic binder compound at least one hydrophobic binder compound are present adhering said zinc compound to said substrate.

- 40.(New) The treated substrate of Claim 39 wherein said substrate is an individual yarn.
- 41.(New) The treated substrate of Claim 39 wherein said substrate is a textile fabric.
- 42.(New) The treated substrate of Claim 39 wherein said substrate is a film.
- 43.(New) The treated substrate of Claim 39 wherein said finish comprises metal particles.
- 44.(New) The treated substrate of Claim 39 wherein said finish comprises metal-ion generating compounds.
- 45.(New) The treated substrate of Claim 43 wherein said finish comprises a metal selected from one of the transition metals.
- 46.(New) The treated substrate of Claim 45 wherein said transition metal is selected from the group consisting of silver and zinc.